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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,764	04/05/2000	John L. Howes		6749

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[REDACTED] EXAMINER

ZURITA, JAMES H

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 01/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/543,764	HOWES, JOHN L.
Examiner	Art Unit	
James Zurita	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Application of 5 April 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-34 is/are rejected.
- 7) Claim(s) 1, 2, 3, 4, 5, 6, 10, 16, 21, 22, 28, 29, 34 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

Applicant did not file an Information Disclosure Statement as part of his application not as part of his Petition to Make Special. Nevertheless, Examiner will consider Prior Art listed in both the application and the Petition to Make Special. Prior Art references will be made of record on Examiner's Notice of References Cited, (PTO form 892).

Specification

The specification is objected to because of the following informalities:

On page 23, line 17, *consumer 11* should be changed to *consumer 10*.

On page 24, lines 1, 6, 11, 20, *consumer 11* should be changed to *consumer 10*.

On page 24, lines 21 and 25, *modem connection 12* should be changed to *modem connection 13*.

On page 25, line 1, *consumer 19* should be changed to *consumer 10*.

On page 25, line 3, *liquid coating product 26* should be changed to *liquid coating product 36*.

On page 25, lines 10 and 19 *consumer 11* should be changed to *consumer 10*

On page 26, line 22, should read "and the -- number of -- containers utilized in fulfillment of each order" or similar wording.

On page 27, line 1, *shipping 30* should be changed to *shipping 27*.

On page 28, line 25, *production subsystem 20* should be changed to *production subsystem 21*.

On page 29, lines 8-9 *production subsystem 20* should be changed to *customer order subsystem 20*.

On page 29, line 22, *the number of different liquid coating products 26 comprising the order* should be clarified to *the number of containers 26 comprising the order*, or similar wording to clarify that item **26** refers to the concept of "this is container # of total of ## containers."

On page 29, line 23, *a bar or other code 51* should be changed to *a bar or other code 52*.

On page 29, line 25, *a bar or other code 37* should be changed to *a bar or other code 52*.

On page 30, lines 22-23 *would largely the economy* should be changed to *would largely – negate -- the economy* or similar wording.

Examiner believes these to be word processing errors. For purposes of this examination, Examiner will apply the above corrections.

Applicant is encouraged to review the application for similar errors. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "superior" in claim 1 is a relative term which renders the claim indefinite. The term "superior" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "standard volume" in claims 1, 2, 3 is a relative term which renders the claim indefinite. The term "standard volume" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "non-standard volume" in claims 4, 5, 6 is a relative term which renders the claim indefinite. The term "non-standard volume" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. While applicant discusses partially filling a container for output, and describes input to the manufacturing process via 55-gallon barrels and s and railroad tank cars inclusive of 1,000 liter totes, applicant does not otherwise define what he considers standard and non-standard volumes.

The term "particular, non-standard, colors" in claims 1, 29, 34, is a relative term which renders the claim indefinite. The term "particular, non-standard, colors" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of

the scope of the invention. Applicant describes the use of "particular, non-standard, colors" as contrasted with standard colors carried by retailers. Applicant fails to clearly define what makes a color standard or non-standard. In computers, colors may differ based on the device or medium used to display them. For example, a display terminal run by MICROSOFT WINDOWS offers a choice of processing images with 256 colors, or with 65,256 colors, or with 16,777,216 colors. Thus, claim 34, which permits customer digital input via digital video as well as digital photographs. Colors may be defined as consisting of different weighs of green, red and blue for computer imagery. A color may also be defined as a specific point or as a range of points on a light spectrum. Thus, the terms standard and non-standard, as applied to color in the context of applicant's invention concerning liquid coating products such as paints and colorants, is indefinite.

The term "color" in claims 10, 16 is a relative term which renders the claim indefinite. The term "color" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. See explanation of color as related to claims 1, 29 and 34, above.

Claims 21, 22 and 28 recite the limitation "the" in "production subsystem". There is insufficient antecedent basis for this limitation in the claim. Alternatively, Claim 1 recites the limitation "said" in "production subsystem" while having identified only a customer order subsystem.

For purposes of this examination, Examiner will apply the above corrections.

Applicant is encouraged to review the application for similar errors. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over a publication entitled Web Ordering May Alter Role of Distributors, published by National Home Center News, v. 24, n. 10, p. 23-25, on June 22, 1998, by Carol Tice, herein after referred to as *DISTRIBUTOR ROLES*.

As per claim 1, Distributor Roles discloses the business method for the direct supply for containerized liquid coating product inclusive of a plurality of particular, non-standard, colors by a supplier remote from a consumer, said business method comprising the steps of

placing by at least one consumer of a customer order directly with a remote supplier specifying customer order information including indication of at least one liquid coating base, a color, a quantity, delivery address and identification of the customer; entering said customer order information into a customer order subsystem comprised of software maintained on a computer;

compiling said customer order information with a computer and processing the results of this compilation to yield production parameters;

operating, in observance of said production parameters yielded by said production subsystem, a containerized liquid coating production line capable of producing a plurality of particular, non-standard, color containerized liquid coatings with a precision in the addition of colorant to liquid coating base superior to the precision readily obtainable by a conventional local retailer;

assembling containerized liquid coating product resulting from said production line fulfilling at least one individual customer order and packaging the resulting assemblage-as required for shipment;

transporting each said assemblage of containerized liquid coating product fulfilling each said customer order to the delivery address specified by the consumer in placing the customer order;

whereby each said consumer obtains delivery of containerized liquid coating product directly to a specified address which may be inclusive of particular, non-standard, colors of superior consistency with regard to color without need for the addition of colorant and by a local retailer to standard volume containers of liquid coating product.

See page 3, *The future that's already here* describing placing orders for home improvement products (including Electronic Internet customer ordering of tools, lumber and other building materials) from distributors and manufacturers, entering data and producing product details (page 3, paragraph 12), and home improvement distributor

applications. Page 3, line 2, describing product assembly; page 3, paragraph 5 include the bulkiest home improvement products. Page 3, paragraph 1, describing that orders may be taken electronically and shipped directly from manufacturers to consumers; page 3, paragraph 4, describing drop-shipment; page 4, *Delivering the Goods*)

DISTRIBUTOR ROLES does not disclose ordering, production, packaging and delivery of liquid coatings. While DISTRIBUTOR ROLES discloses a customer order subsystem, the article does not specifically detail said subsystem.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose ordering, production, packaging and delivery of liquid coatings. It would also have been obvious to one of ordinary skill in the art to describe the components of a customer order subsystem.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose ordering, production, packaging and delivery of liquid coatings for the obvious reason that liquid coatings are another type of product that is in great demand by customers for home improvements and home building. One of ordinary skill in the art at the time the invention was made would also have been motivated to include the components of a customer order subsystem for the obvious reason that customer order entry systems and subsystems have been used for many years and said customer order entry systems and subsystems make it possible for customers to enter orders and participate in electronic commerce.

Besides liquid coatings, hardware stores and home improvement retailers (e.g., HOME DEPOT, LOWE's) often sell the following products. In alphabetical order:

adhesives, board lumber, cleaning fluids, colorants, disinfectants, electric wiring, epoxy resins, lubricating oils, paints, pesticides, plumbing supplies, propane gas, sealants, shellacs, soaps (solid and liquid), stains, tools (including drills, bits, electric saws, pipe cutters, etc.), varnishes, wood pulp products (including particle boards, plywoods, pressed board, etc.). Home improvement products may be sold by volume, by unit, by weight, or by length, as applicable.

Liquid coatings are often found side by side with other home improvement products. Many lumber products are best used with liquid coatings. Liquid coatings are often delivered to job sites and customer addresses.

One of ordinary skill in the art at the time the invention was made would know that by including liquid coatings among their products and services, distributors provide ordering convenience and lower priced products since distributors would buy home improvements from manufacturers in large numbers and volume. Distributors would also benefit from becoming electronic clearinghouses. Distributors would cut their operational costs since they would not have to receive, store and ship product orders without the need to do so. Distributors would have no need to maintain an inventory, which would include standard and non-standard volumes and standard and non-standard colors of liquid coatings. Distributors provide the economic benefit of just-in-time inventory, which reduces inventory costs to customers.

As per claims 2 and 3, DISTRIBUTOR ROLES discloses electronic commerce in home improvement products.

DISTRIBUTOR ROLES does not disclose that home improvement products may include liquid coating products and that the liquid products are containerized in standard volume containers and that fulfillment of a customer order includes partially filling one of the standard volume containers.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose that home improvement products may include liquid coating products and that the liquid products are containerized in standard volume containers and that fulfillment of a customer order includes partially filling one of the standard volume containers.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that home improvement products may include liquid coating products and that the liquid products are containerized in standard volume containers and that fulfillment of a customer order includes partially filling one of the standard volume containers. Liquids are normally measured by volume. Volume is measured in metric units (liters, deciliters, millimeters, etc.) and English units (including gallons, quarts, pints, ounces, etc.). To facilitate exchange and commercial transactions for fungible products, both buyers and sellers must be able to define a measure of exchange: they must be able to define the cost of a unit of measure: how much money (US dollars, French Francs, etc.) does it cost to purchase a volume unit (metric or English). Where a customer orders a volume of a liquid that falls between increments of the unit being measured, it makes economic sense to only partially fill one of the standard volume containers. A seller normally incurs economic loss if he provides more

of a product than what is being purchased; a buyer normally does not want to pay more than he has to. Buyers would probably take their business to a seller that can provide more for the buyer's money. Thus, one of ordinary skill in the art would know to disclose that liquid products are containerized in standard volume containers and that fulfillment of a customer order may include partially filling one of the standard volume containers.

As per claims 4-6, DISTRIBUTOR ROLES discloses the method of claim 1 for home improvement products. DISTRIBUTOR ROLES does not disclose that the liquid product is containerized in non-standard volume expandable containers, that the expandable containers are of molded plastic construction and that the expandable containers possess a collar about an aperture whose collar is gripped during operation of the production line.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose that the liquid product is containerized in non-standard volume expandable containers, that the expandable containers are of molded plastic construction and that the expandable containers possess a collar about an aperture whose collar is gripped during operation of the production line.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that the liquid product is containerized in non-standard volume expandable containers, that the expandable containers are of molded plastic construction and that the expandable containers possess a collar about an aperture whose collar is gripped during operation of the production line for the obvious reason

that manufacture and distribution of many liquid coating products is often regulated by government entities, sometimes referred to as Environmental Protection Agencies (EPA). These regulatory international and national bodies may dictate requirements for storage, transportation and delivery liquid coating products. The entities may determine what products fall within their definitions of hazardous materials. These bodies may regulate that some liquid coating products must be transported in metal containers, while others may be transported in plastic containers. The regulatory bodies may define other requirements, including the density of the plastic containers, the chemical composition of the plastic, and even the rigidity of the walls of the containers. Proper packaging also prevents leakage and waste in storage, production and transport. Heavier liquid coating materials would normally require thicker plastic containers, collapsible or rigid, than lighter liquid coating materials.

One of ordinary skill in the art would know that higher volumes may require sturdier containers for storage, transport and delivery. For example, a 10-thousand gallon container of liquid coating product would normally require thicker walls than the walls of a container designed to transport a 1-ounce, 1-gallon or 55-gallon volume of the same liquid coating product. While bulk-shipments may reduce shipping costs, shipping is often based on weight, including the weight of individual containers. Thus, thick, rigid metal containers would probably weigh more than their plastic equivalents. Similarly, thicker plastic containers would weigh more than thinner plastic containers. Collapsible plastic containers would most likely weigh less than rigid walled plastic containers.

One of ordinary skill in the art would know that bottling a liquid is best accomplished by filling the container through an aperture that is simultaneously held by a gripping mechanism. This assures that the bulk of the liquid is properly transferred into a container, thereby eliminating waste of the liquid and preventing the liquid from interfering with the operation of production machinery. Additionally, gripping a container by a collar facilitates placement of a sealing top on the container.

It would be obvious to one of ordinary skill in the art that, where possible, it makes economic sense to use collapsible plastic containers for shipment of some liquid coating products. Manufacturers and distributors would spend less money to acquire empty containers prior to filling the containers with liquid products. Thus, production costs are lowered, allowing manufacturers and distributors to possibly charge less for their products because they may pass part of the savings to their customers. Lower production costs allows better use and allocation of scale production and allow for better utilization of natural resources. Better natural resource use and allocation also permits less contamination and provides everyone on the planet with a healthier environment.

As per claims 7-10, DISTRIBUTOR ROLES discloses the methods of claim 1 of identifying products for assembly and delivery (page 3, paragraph 1, describing that orders may be taken electronically and shipped directly from manufacturers to consumers; page 3, paragraph 4, describing drop-shipment; page 4, *Delivering the Goods*).

DISTRIBUTOR ROLES does not disclose which data is selected for print on the label of a container. DISTRIBUTOR ROLES does not use the words "digital code

readable by a scanner.” DISTRIBUTOR ROLES does not specifically state that the information on a container may include at least one of the group comprised of color of liquid coating product, customer name, delivery date, quantity of product in order, number of containers for each liquid coating product in the order.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select data for placing on a container as an identifying label. It would also have been obvious to one of ordinary skill in the art at the time the invention was made to include bar code(s), text and images on a container’s label, and to include at least one of the group comprised of color of liquid coating product, customer name, delivery date, quantity of product in order, number of containers for each liquid coating product in the order.

One of ordinary skill in the art at the time the invention was made would have been motivated to select data for placing on a container as an identifying label, to include bar code(s), text and images on a container’s label, and to include at least one of the group comprised of color of liquid coating product, customer name, delivery date, quantity of product in order, number of containers for each liquid coating product in the order for the obvious reason that the methods and technology for using bar codes have existed for several decades for process and inventory control (in supermarkets, for example). The technology has also been very successful for delivery of packages and letters (for example, U.S. Postal Service, UNITED PARCEL POST, FEDERAL EXPRESS). Barcode applications have long been used in product manufacture (for example, on containers of COCA COLA).

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In order to deliver a product, the package or container normally has information as to where the item is to be sent. This information normally includes geographic location such as country, city, street and number. The information also normally includes the name of the recipient. Other critical information includes delivery date, total number of containers in the shipment, content information, etc. To speed up and save money during production, bar codes and bar code labels can hold information as to where a container is in a manufacturing production line. One would want to automate the method of identifying different containers and processing steps for the obvious reason that it avoids confusion, permits machines to more efficiently read and process information concerning the container and its contents.

As per claims 11-16, DISTRIBUTOR ROLES discloses that home improvement products may be sold in bulk from a manufacturer to a distributor, and even from a manufacturer to a customer, for example, a construction contractor at his job sites (page 3, paragraph 1, describing that orders may be taken electronically and shipped directly from manufacturers to consumers; page 3, paragraph 4, describing drop-shipment; page 4, *Delivering the Goods*). Home improvement products include liquid coating products.

DISTRIBUTOR ROLES does not specifically describe the process of adding blended liquid coating base to an empty container. While DISTRIBUTOR ROLES discloses that manufacturers may ship liquid home improvement products directly to distributors and customers in containers, DISTRIBUTOR ROLES does not specifically mention 55-gallon barrels or railroad tank cars (as in claim 12). DISTRIBUTOR ROLES

does not describe that the liquid product is transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13). DISTRIBUTOR ROLES does not describe steps for identifying the type of liquid coating base added upon the container (claim 14), adding colorant to the blended liquid coating base (claim 15) and identifying the resulting color (claim 16).

While DISTRIBUTOR ROLES discloses that manufacturers may ship liquid home improvement products directly to distributors and customers, DISTRIBUTOR ROLES does not specifically mention 55-gallon barrels or railroad tank cars (as in claim 12). DISTRIBUTOR ROLES does not describe that the liquid product is transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13). DISTRIBUTOR ROLES does not describe steps for identifying the type of liquid coating base added upon the container (claim 14), adding colorant to the blended liquid coating base (claim 15) and identifying the resulting color (claim 16).

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose that manufacturers may ship liquid home improvement products directly to distributors and customers in 55-gallon barrels or railroad tank cars (as in claim 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to describe that the liquid product is transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include steps for identifying the type of liquid coating base added

upon the container (claim 14), adding colorant to the blended liquid coating base (claim 15) and identifying the resulting color (claim 16).

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that manufacturers may ship liquid home improvement products directly to distributors and customers in 55-gallon barrels or railroad tank cars (as in claim 12) for the obvious reason that bulk purchases from a manufacturer may lower the overall costs of producing goods. By achieving economies of scale, both manufacturers and distributors save money and may pass their savings down the production and distribution chain. Thus all parties benefit, creating jobs and financial opportunities.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that a liquid product may be transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13) for the obvious reason that raw materials must be integrated into a manufacturing process and a first step of doing so includes identifying and using the materials received from a manufacturer. While one can always integrate outside containers into a manufacturing process, it may be necessary to first transfer the product into the specific product line. While terms of product delivery will vary by industry, offloading a railroad tank, for example, could mean that a railroad tank may be leased only for a short length of time, cutting down overall production costs. This savings can be used to improve marketing, or may be passed directly to customers.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose steps for identifying the type of liquid coating base added upon the container (claim 14), adding colorant to the blended liquid coating base (claim 15) and identifying the resulting color (claim 16) for the obvious reason that in a manufacturing process that includes blending and mixing different products, it is critical to know what products are being mixed. For example, if a customer orders a variation of royal blue rubber based coating, it would be bad business if one sent the customer a variation of pink water based indoor paint. Similarly, if a customer is a car manufacturer and orders large volumes of automotive refinishing paints and coatings in various standard and non-standard colors, it would be very bad to send him water-based indoor non-standard variations of an unordered different color.

As per claims 17-22, DISTRIBUTOR ROLES discloses that orders from a customer to a supplier may be placed via telecommunications (as in claim 17), with the use of a telephone connected to a public telephone exchange (as in claim 18), via facsimile transmission (as in claim 20) (page 1, paragraph 3, page 3, paragraph 11). As in claim 19, DISTRIBUTOR ROLES also discloses that supplier personnel may enter customer orders into a customer order subsystem (page 3, paragraph 11).

While DISTRIBUTOR ROLES discloses the use of a customer order subsystem and a production subsystem, DISTRIBUTOR ROLES does not disclose that the customer order subsystem and the production subsystem are both maintained on the same computer (as in claim 21). DISTRIBUTOR ROLES does not disclose that the

customer order subsystem is maintained on one computer and the production subsystem is maintained on a different computer (as in claim 22).

Nevertheless, it would have been obvious to one of ordinary skill in the art to place the customer order subsystem and a production subsystem on separate computers, as well as to place the two subsystems on the same computer.

One of ordinary skill in the art would have been motivated to place the customer order subsystem and a production subsystem on separate computers, as well as to place the two subsystems on the same computer for the obvious reason that when designing client/server systems, both system architectures present valid, useful and safe alternatives. One of ordinary skill in the art would have known that co-locating the two subsystems would be safer where there is limited access to the outside world, such as in an EDI application. One of ordinary skill in the art would also know that Internet commerce includes digital certificates, encryption, passwords, etc., and that these methods have made it safer to co-locate subsystems on a single physical computer. One of ordinary skill in the art would also know that placing the subsystems on different physical or logical computers may allow larger manufacturers to more efficiently run their order and production subsystems. On a system that has a heavy Internet volume, for example, it may make more sense to have the customer order subsystem to provide faster access. It may also make sense to have production databases accessed by a separate machine. Other considerations that must be taken into effect include network load balancing, I/O operations and disk utilization, and CPU speed for different workloads.

As per claim 23-24, DISTRIBUTOR ROLES discloses that the step of placing an order by a customer directly with a remote supplier of liquid coating product is conducted with the use of the Internet (DISTRIBUTOR ROLES, page 2, paragraphs 8, 9 describing that customers may use an Internet-wired kiosk, place an order with a distributor, and the distributor would ship the ordered product to a customer's home). DISTRIBUTOR ROLES does not disclose the use of a [portable] Internet device (as in claim 24).

Nevertheless, it would have been obvious to one of ordinary skill in the art to include the use of portable internet devices as part of electronic commerce customer order system.

One of ordinary skill in the art would have been motivated to include the use of portable internet devices as part of electronic commerce customer order system for the obvious reason that these devices are readily available and adaptable to many types of applications, particularly customer order systems and subsystems. One of ordinary skill in the art would know that portable devices have long included PALM Personal Digital Assistants (PDA), cellular telephones with display, and others. Thus, it would be obvious to utilize the devices' design to connect customers to the Internet. Such links would facilitate increased customer orders, producing more orders and contribute to the overall economy.

As per claims 25-28, DISTRIBUTOR ROLES discloses the method of claim 24 wherein the step of placing an order by a consumer directly with a supplier of liquid coating product is conducted with use of a dedicated terminal with internet access only

to a web site maintained by the supplier (Page 2, paragraph 8, describing an Internet kiosk).

While DISTRIBUTOR ROLES discloses the use of customer orders and production, DISTRIBUTOR ROLES does not disclose that the step of entering customer orders into a customer order subsystem is accomplished by the computer maintaining the customer order subsystem (as in claim 26). DISTRIBUTOR ROLES does not disclose that the customer order subsystem and the production subsystem are both maintained on the same computer (as in claim 27). DISTRIBUTOR ROLES does not disclose that the customer order subsystem is maintained on one computer and the production subsystem is maintained on a different computer (as in claim 28).

Nevertheless, it would have been obvious to one of ordinary skill in the art to place the customer order subsystem and a production subsystem on separate computers, as well as to place the two subsystems on the same computer.

One of ordinary skill in the art would have been motivated to place the customer order subsystem and a production subsystem on separate computers, as well as to place the two subsystems on the same computer for the obvious reason that when designing client/server systems, both architectures present valid, useful and safe alternatives. One of ordinary skill in the art would have known that placing the two subsystems would be safe where there is limited access to the outside world, such as in an EDI application. Internet commerce has developed in an environment where digital certificates, encryption, passwords, etc., have made it safer to place both subsystems on the same physical computer. However, placing the subsystems on different physical

computers allows larger manufacturers to more efficiently run their order and production subsystems. On a system that has a heavy Internet volume, for example, it may make more sense to have the customer order subsystem be on a separate physical computer to provide faster access. Depending on the amount of data being retained, it may also make sense to have production databases accessed by a separate machine. Other considerations that must be taken into effect include network load balancing, I/O operations and disk utilization, and CPU speed for different workloads. Thus, one of ordinary skill in the art would have known that while a customer order subsystem may be placed on a separate computer from where the information is entered, one would optimize resource utilization by evaluating and comparing overall system architecture, expected load volumes and times, database utilization, network connectivity among other factors. In the absence of other factors, it may be fastest to enter customer data into the same computer that maintains the customer order subsystem.

As per claims 29-34, DISTRIBUTOR ROLES discloses the use of the Internet and electronic commerce, including Electronic Data Interface (EDI), to allow customers to order home improvement products (page 1, paragraph 1; page 4, paragraph 9). DISTRIBUTOR ROLES does not describe include plurality of standard and non-standard colors (claim 29), specific characteristics (claim 30) of liquid coating products according to job specifications (claim 31), recommendation of liquid coating base (claim 32), volume calculation per user input (claim 33), or that customer input may include digital video, photograph or digital solid modeling (claim 34).

Nevertheless, it would have been obvious to one of ordinary skill in the art to include plurality of standard and non-standard colors (claim 29), specific characteristics (claim 30) of liquid coating products according to job specifications (claim 31), recommendation of liquid coating base (claim 32), volume calculation per user input (claim 33), or that customer input may include digital video, photograph or digital solid modeling (claim 34).

One of ordinary skill in the art would have been motivated to include plurality of standard and non-standard colors (claim 29), specific characteristics (claim 30) of liquid coating products according to job specifications (claim 31), recommendation of liquid coating base (claim 32), volume calculation per user input (claim 33), or that customer input may include digital video, photograph or digital solid modeling (claim 34).for the obvious reason that these are normal considerations when selecting liquid coating product bases and colors (standard and non-standard). It is obvious that different customers have different requirements. For example, a customer who wishes to paint his child's room would have different needs from an industrial customer who wishes to paint many automobiles. Similarly, architectural customers have different needs from customers who order liquid coating products for use to coat the bottom of a yacht, or to coat the outside of a train or the outside of a truck or bus. Thus, one of ordinary skill in the art would have known to include steps to facilitate customer selections and include requirement characteristics that would facilitate selection of standard and non-standard colors, base, volume, among others. One of ordinary skill in the art also would have known that since customers have specific needs, a web site might also include means

for a customer to input digital video, digital photograph as well as digital solid modeling. One of ordinary skill in the art would know that Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) systems have been widely used in industry for several decades. Thus, it would have obvious to include similar technology in the design of web sites for selection of standard and non-standard liquid coating products for home improvement and for other uses.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8:30 am to 5:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-395-3900.

JZ
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